

Exhibit 15

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO
EASTERN DIVISION**

IN RE NATIONAL PRESCRIPTION
OPIATE LITIGATION

This document relates to:

*The County of Summit, Ohio, et al. v. Purdue
Pharma L.P., et al.*
Case No. 18-op-45090

*The County of Cuyahoga, Ohio, et al. v. Purdue
Pharma L.P., et al.*
Case No. 17-op-45004

MDL No. 2804

Case No. 17-md-2804
Hon. Dan Aaron Polster

EXPERT REPORT OF PRADEEP K. CHINTAGUNTA, PH.D.

May 10, 2019

I. Qualifications

1. I am the Joseph T. and Bernice S. Lewis Distinguished Service Professor of Marketing at the Graduate School of Business at the University of Chicago. Prior to joining the University of Chicago, I was an Associate Professor (with tenure) at the S.C. Johnson Graduate School of Management at Cornell University. I also have held the position of Thomas Carroll Ford Foundation Visiting Professor of Marketing at the Harvard Business School between September and December 2002 and was a distinguished visiting scholar at Stanford University in 2012.
2. At the University of Chicago, I teach courses on marketing strategy and marketing management to MBA and Executive MBA students. I also teach courses on marketing models to Ph.D. students at the University of Chicago and have previously done so at Cornell University.
3. I obtained my Ph.D. from the Kellogg Graduate School of Management at Northwestern University in 1990. My Ph.D. dissertation was titled “Issues in Panel Data Analysis” in which I studied issues relating to consumer purchase behavior and differences in behavior across consumers. I also hold a Post Graduate Diploma in Management from the Indian Institute of Management in Ahmedabad and a Bachelor of Technology degree from the Indian Institute of Technology, Banaras Hindu University, India.
4. I have published over 100 peer-reviewed academic articles over the course of my career to date. My articles have been published in the top journals in marketing including *Marketing Science*, *Management Science*, *Journal of Marketing Research*, *Journal of Marketing*, and *Quantitative Marketing & Economics*. I also have published in journals focused on econometrics and statistics such as the *Journal of Econometrics* and the *Journal of the American Statistical Association*. A copy of my curriculum vitae is included as **Appendix A** to this report. A list of my prior testimony for the past four years is included as **Appendix B** to this report.
5. Over the years, my research has investigated how prescription choice is impacted by factors such as marketing activities, patient satisfaction, academic research, and FDA regulations. For example, one of my studies examined the differences in how physicians respond to detailing and how patient satisfaction and feedback could influence subsequent

prescribing behavior of physicians. I have also investigated how physicians' relative preference across medicines is sensitive to news reports, academic articles, and FDA updates.

6. I currently bill for my services at \$850 per hour. Staff at Cornerstone Research, a consultancy, worked under my direction and helped me prepare my report. I receive compensation from Cornerstone Research based on its collected staff billings for its support of me in this matter. Neither my compensation for my work on this matter nor my compensation from Cornerstone Research is contingent upon the outcome of this litigation or on the content of the opinions that I offer in this matter.

II. Assignment

7. I have been retained by counsel for Teva Pharmaceuticals USA, Inc. ("Teva USA"), Cephalon, Inc. ("Cephalon"), Actavis Pharma, Inc. ("Actavis Pharma"), Actavis LLC ("Actavis LLC"), Watson Laboratories, Inc. ("Watson"), Anda, Inc. ("Anda"), and their affiliates¹ to review and respond to opinions related to pharmaceutical marketing in the Plaintiffs' expert reports.² In particular, I have been asked to: (i) evaluate the nature and extent of marketing of at-issue opioid products by the Teva and Actavis Generic Defendants and analyze the extent to which marketing and other factors influence physicians' prescribing decisions; (ii) assess the validity of Dr. Rosenthal's econometric analyses regarding the impact of the manufacturer Defendants' promotion on opioid sales;³ and (iii) evaluate the extent to which academic publications are sponsored by the Teva Defendants and their influence relative to other academic publications.⁴

¹ Teva USA and Cephalon are referred to as the "Teva Defendants." Actavis Pharma, Actavis LLC, Watson, Warner Chilcott Company, LLC, Actavis South Atlantic LLC, Actavis Elizabeth LLC, Actavis Mid Atlantic LLC, Actavis Totowa LLC, Actavis Kadian LLC, Actavis Laboratories UT, Inc. f/k/a Watson Laboratories, Inc.-Salt Lake City, and Actavis Laboratories FL, Inc., f/k/a Watson Laboratories, Inc.-Florida are referred to as the "Actavis Generic Defendants." In addition, I understand that Teva Pharmaceutical Industries, Ltd. ("Teva Ltd.") has been named as a defendant in this case based upon the conduct of the Teva and Actavis Generic Defendants, but contests personal jurisdiction. The opinions stated herein as to the Teva and Actavis Generic Defendants also apply to Teva Ltd.

² I understand that Anda is a "Distributor Defendant" and is not alleged to have engaged in any of the marketing conduct that is the subject of Dr. Rosenthal's expert report (or others). To the extent Dr. Rosenthal were to offer any marketing-related opinions as to Anda, they would be unfounded for the general reasons discussed herein.

³ In the rest of my report, I use "opioid sales" and "opioid shipments" interchangeably to refer to the volume of opioid sold by manufacturers.

⁴ In this matter, at-issue opioid medicines consist of the following branded opioid medicines: Actiq, Butrans, Dilaudid, Dilaudid HP, Duragesic, Exalgo, Fentora, Hysingla ER, Kadian, Methadose, MS Contin, Norco, Nucynta, Nucynta ER, Opana, Opana ER, OxyContin, Percocet, Percodan, Roxicodone, Subsys, Targiniq ER, and Xartemis XR, as well as the generic opioid medicines related to the following molecule names: buprenorphine, fentanyl,

(such as detailing, funding of research, lobbying groups, and interest groups) to affect opioid sales and that the manufacturer Defendants recognized the effectiveness of their promotion.³¹

20. I understand other Plaintiffs' experts also assert that the manufacturer Defendants' marketing efforts were deceptive and unlawful and have led to an unsafe level of opioid prescriptions in the Bellwether Counties.³²

IV. Summary of Opinions

21. Plaintiffs' experts claim that the manufacturer Defendants' alleged unlawful marketing practices led to an increase in opioid prescriptions and ultimately to an increase in opioid abuse in the Bellwether Counties and the U.S. Plaintiffs' experts fail to establish that the Teva or Actavis Generic Defendants' alleged false and misleading marketing practices *caused* the increase in opioid sales in the Bellwether Counties and the U.S. during the proposed period of allegations.

22. Dr. Rosenthal's quantitative analyses cannot be used to assess the extent to which the manufacturer Defendants' alleged unlawful marketing practices led to an increase in opioid prescriptions, much less to assess the extent to which the alleged conduct by the Teva and Actavis Generic Defendants increased the sales of opioid products. My conclusions are based on the following reasons.

23. First, Plaintiffs' experts fail to recognize that the Teva and Actavis Generic Defendants' promotional activities for prescription opioids were extremely limited. With respect to their branded opioids, the Teva Defendants used common tools to promote Actiq and Fentora. In addition, the Teva Defendants' marketing-to-sales ratios for these medicines have been less than those of the pharmaceutical industry across the U.S. With respect to their generic opioids, I find that the Teva and Actavis Generic Defendants did not promote the safety or efficacy of their generic medicines, and the marketing spending of their generic medicines is minimal. This is consistent with the well-known fact that manufacturers rarely, if at all, promote generic medicines.

³¹ Rosenthal Report, ¶¶ 39–48.

³² See, for example, Expert Report of Dr. Matthew Perri III, March 25, 2019 ("Perri Report"), pp. 8–9; and Expert Report of Dr. Mark A. Schumacher, March 25, 2019, ¶¶ 9, 43–50. Cuyahoga County and Summit County are referred to as "Bellwether Counties".

characteristics as well as physician and patient experience; (iv) patient characteristics; and (v) medicine characteristics, also influence physicians' prescribing decisions. Therefore, Plaintiffs' experts cannot establish the contribution of the manufacturer Defendants' marketing activities, if any, to the increased prescriptions and sales of opioid medicines. Neither can Plaintiffs' experts establish the contribution of the Teva and Actavis Generic Defendants' marketing activities (much less false marketing activities), if any, to the increased prescriptions and sales of opioid medicines.

28. Sixth, Dr. Rosenthal's negative depreciation rate is both implausible and unsupported by the academic literature. A negative depreciation rate implies that past detailing contacts have a greater—and not a weaker—effect over time, which is illogical. The academic research in marketing, including in the pharmaceutical industry, uses positive depreciation rates. Therefore, Dr. Rosenthal's estimated impact of promotional efforts on the sales of opioid products based on such negative depreciation is also unreliable.

29. Seventh, Plaintiffs' experts fail to recognize that the academic publications sponsored by the Teva Defendants had limited impact, if any, on the information available to physicians. In particular, the Teva Defendants did not sponsor the majority of the academic publications on using opioids for treating pain, and the articles it did sponsor are less "influential" than those sponsored only by the U.S. government.

V. Plaintiffs and Plaintiffs' Experts Fail to Acknowledge that the Teva and Actavis Generic Defendants' Levels of Promotional Activities for Prescription Opioids Were Limited and Less Than Typical Promotional Efforts in the Pharmaceutical Industry

30. Plaintiffs and Plaintiffs' experts claim that the manufacturer Defendants' alleged false and misleading marketing practices have led to increased opioid prescriptions, opioid abuse, and damages, yet none of the Plaintiffs' experts has quantified the magnitude of the Teva Defendants' promotional activities during the proposed period of allegations, let alone the magnitude of their alleged false and misleading promotional activities. In this section, I show that the Teva Defendants' promotional efforts for their branded prescription opioids, Actiq and Fentora, were less than those undertaken in the pharmaceutical industry for all pharmaceutical medicines. I understand from Dr. Nicholson that the Teva Defendants had a

miniscule share of opioid sales in the Bellwether Counties.³³ I also show that the Teva and Actavis Generic Defendants incurred minimal marketing spending for their generic medicines and did not promote the safety and efficacy of their generic medicines to physicians.

A. Overview of the Teva Defendants' Promotional Efforts for Actiq and Fentora

31. According to Dr. Rosenthal's IQVIA data, promotional spending for Actiq began in February 1999. **Exhibit 1** shows that marketing spending for Actiq gradually increased from February 1999 through 2004, experienced slight declines in 2005 and 2006, followed by a substantial decline starting in 2007, the first full year in which generic versions of Actiq were available.^{34, 35, 36} **Exhibit 2** shows that the promotional spending for Fentora began in September 2006 and fluctuated during the next several years at an average level similar to that of Actiq before the generic versions of Actiq became available. Starting in 2016, promotional spending for Fentora substantially declined.^{37, 38}

32. Marketing spending for Actiq and Fentora by the Teva Defendants, as defined by Dr. Rosenthal, was low relative to spending by all manufacturers on prescription opioids during the proposed period of allegations.³⁹ **Exhibit 3A** shows that between February 1999 and May 2018, the Teva Defendants' marketing spending for Actiq and Fentora was on average 6 percent of the marketing spending for all of the branded and generic opioids in Dr. Rosenthal's IQVIA data. **Exhibit 3B** shows that a similar pattern holds for the Teva Defendants' number of detailing contacts for Actiq and Fentora. On average, the Teva

³³ Expert Report of Dr. Sean Nicholson, May 10, 2019, ¶¶ 42–43.

³⁴ Cephalon 2006 10-K, p. 9.

³⁵ The marketing spending for Actiq in **Exhibit 1** includes the promotional spending by “Abbott,” “Anesta Corporation,” “Cephalon Inc,” and “Teva” as recorded in Dr. Rosenthal's IQVIA data. In 1999 and 2000, Actiq was primarily marketed by Abbott Laboratories in the U.S. under a license agreement with Anesta. See, Protext, “Anesta Corp. Licenses Actiq Rights to Elan / Novel Breakthrough Pain Therapy to Be Marketed by Elan Pharma International,” available at <http://www.protext.cz/novy/press-release.php?id=1344>, accessed on February 28, 2019.

³⁶ It is my understanding from the Teva Defendants' internal documents that Cephalon “ceased all promotion and sales force activity associated with Actiq” as of September 25, 2006. “Actiq Risk Management Program: 31st Quarterly Report,” March 29, 2007, TEVA_MDL_A_00283237–264 at TEVA_MDL_A_00283253.

³⁷ The marketing spending for Fentora in **Exhibit 2** includes the promotional spending by “Cephalon Inc,” and “Teva” as recorded in Dr. Rosenthal's IQVIA data.

³⁸ John Hassler, the Teva Defendants' corporate representative and a Senior Vice President, testified that Fentora is no longer promoted by the Teva Defendants. Deposition of John Hassler, November 16, 2018 (“Hassler Deposition (November 2018)”), p. 42:5–10.

³⁹ The marketing spending in **Exhibit 3** includes the promotional spending by manufacturers Dr. Rosenthal classified as “Teva” in her Defendant classification. This includes promotional spending by “Anesta Corporation,” “Cephalon Inc,” and “Teva” as recorded in Dr. Rosenthal's IQVIA data.

C. Plaintiffs Fail to Acknowledge that the Teva and Actavis Generic Defendants Did Not Promote the Safety and Efficacy of Their Generic Medicines to Physicians, and Any Marketing of the Availability of Generic Medicines Is Minimal At Best

41. Plaintiffs' experts not only fail to acknowledge that the Teva Defendants' promotional activities for their branded opioid products were in line with the pharmaceutical industry, they also fail to account for the general differences in marketing between branded and generic medicines. While manufacturers employ various promotional tools to market their brand-name products, they typically do not promote their generic medicines.⁶³ Yet, several of the Plaintiffs' experts fail to address the different marketing strategies of branded and generic medicines. Moreover, Plaintiffs' experts have combined branded and generic opioids in their analyses and have not investigated the differential impact of the branded marketing versus the minimal (if any) generic marketing.

42. For example, Dr. Rosenthal purports to have quantified the impact of the manufacturer Defendants' marketing on opioid sales, yet she did not make any distinction between the marketing for, and sales of, branded and generic opioid medicines in her quantitative analyses.⁶⁴ Instead, she concludes that "the combined effect of the Defendant manufacturers' promotion of prescription opioids since 1995 was a substantial contributing factor to the increase in the use of prescription opioids" based on marketing measures aggregated across branded and generic medicines.⁶⁵

43. Generic medicines are versions of already FDA approved brand-name medicines with the same "dosage, safety, effectiveness, strength, stability, and quality, as well as in the way [they are] taken and should be used."⁶⁶ A pharmaceutical company can launch a generic medicine once the patents of the corresponding brand-name medicine expire. Generics typically sell at greatly discounted prices.⁶⁷ Generic sales depend on state automatic substitution laws

⁶³ Federal Trade Commission Report, "Authorized Generic Drugs: Short-Term Effects and Long-Term Impact," August 2011, p. 17.

⁶⁴ Rosenthal Production.

⁶⁵ Rosenthal Report, ¶ 11.

⁶⁶ FDA, "Generic Drug Facts" ("FDA, 'Generic Drug Facts'"), available at <https://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/GenericDrugs/ucm167991.htm>, accessed on February 14, 2019.

⁶⁷ FDA, "Generic Drug Facts."

whereby pharmacies are allowed to, and in some cases are required to, dispense a generic medicine even when a physician writes a prescription for a branded medicine.⁶⁸ Ohio law gives pharmacies the discretion to make that determination.⁶⁹ Oftentimes, a patient's own health insurance provider or Pharmacy Benefit Manager ("PBM") will require that a generic be substituted for the branded prescription once the patient submits their prescriptions at the pharmacy.⁷⁰

44. Manufacturers rarely, if at all, promote generic medicines. For example, the FDA website to consumers states that manufacturers for generic medicines "generally do not pay for advertising, marketing and promotion."⁷¹ This is also consistent with the statements in the Teva Ltd.'s 10-K from 2018: "[i]n markets such as the United States . . . generic medicines may be substituted by the pharmacist for their brand name equivalent In these so-called 'pure generic' markets, physicians and patients have little control over the choice of generic manufacturer, and consequently generic medicines are not actively marketed or promoted to physicians"⁷² Indeed, Dr. Perri acknowledges that "[f]or generics, the chemical entity selected by the prescriber is usually available from multiple manufacturers who are competing for market share. While prescribers still choose the medication to use, it is the pharmacy provider, sometimes working in concert with, and subject to the desires of wholesalers, TPPs ["Third Party Payors"] or PBMs, who typically selects the manufacturer that will supply the generic medication."⁷³ This was also confirmed by Dr. Rosenthal, who testified that "[g]enerally, manufacturers will not detail physicians for generics. They may have other sales force activities that they do that relate to price, but individual physicians are not generally making a decision about one generic versus the other. That decision happens at the pharmacy."⁷⁴

⁶⁸ Henry Grabowski et al., "Does Generic Entry Always Increase Consumer Welfare?," *Food and Drug Law Journal*, 67(3), 2012 ("Grabowski et al. (2012)"), pp. 373–391 at p. 377.

⁶⁹ LAWriter Ohio Laws and Rules, "4729.38 Selecting generically equivalent drugs or interchangeable biological products," available at <http://codes.ohio.gov/orc/4729.38>, accessed on May 8, 2019 ("Unless instructed otherwise by the person receiving the drug pursuant to the prescription, a pharmacist filling a prescription for a drug prescribed by its brand name may . . . select a generically equivalent drug, or, in the case of a drug that is a biological product, select an interchangeable biological product").

⁷⁰ Grabowski et al. (2012), p. 377.

⁷¹ FDA, "Generic Drugs Undergo Rigorous FDA Scrutiny."

⁷² Teva 2017 10-K, p. 5.

⁷³ Perri Report, p. 147.

⁷⁴ Deposition of Meredith B. Rosenthal, May 4, 2019 ("Rosenthal Deposition"), pp. 197:23–198:4.

45. The academic literature finds that manufacturers generally do not promote generic medicines. For example, Lakdawalla and Philipson (2012) find that generic manufacturers spend little to no funding on direct-to-physician promotion, such as detailing and dispensing samples.⁷⁵ Specifically, as explained earlier, generic sales are largely driven by state automatic substitution laws whereby generic medicines can, and in some instances must, be dispensed even when a physician writes a prescription for a branded medicine.⁷⁶ Likewise, the promotion of generics does not guarantee that a manufacturer will recover the value of the promotion because a generic prescription could be filled with any product manufactured by a number of competing generic manufacturers. Thus, any promotion conducted by one manufacturer for its own generic medicines could ultimately benefit the sales of a different generic medicine manufactured by its competitor. This diminishes the value of pharmaceutical promotion for generic medicines. Thus, generic medicines do not rely on marketing to drive medicine sales.⁷⁷

46. To the extent generic medicines are marketed at all, companies merely promote their commercial availability. Generally, there is no promotional spending for detailing or journal advertising for the safety, efficacy, or therapeutic value of the generic medicines. This is supported by the testimony of Dr. Perri as well as those of several former personnel of the Teva and Actavis Generic Defendants. For example, Dr. Perri testified that generic manufacturers “do not promote the safety[,] efficacy, or benefits of their generic medications” and instead “[focus] on consistency of supply, pricing and quality of the products.”⁷⁸ Similarly, Ms. Jinping McCormick, former Marketing Manager at Actavis, mentions that the Actavis Generic Defendants “were not detailing any benefit of the . . . [generic] medicine.”⁷⁹ Mr. Andrew Boyer, former President and Chief Executive Officer of Teva North America, also confirms that the Teva Defendants do not market generic medicines beyond their commercial availability.⁸⁰

⁷⁵ Darius Lakdawalla and Tomas Philipson, “Does Intellectual Property Restrict Output? An Analysis of Pharmaceutical Markets,” *The Journal of Law and Economics*, 55(1), 2012, pp. 151–187 at pp. 169–170.

⁷⁶ Grabowski et al. (2012), p. 377.

⁷⁷ Grabowski et al. (2012), p. 377.

⁷⁸ Deposition of Matthew Perri, April 23 and 24, 2019 (“Perri Deposition”), pp. 547:15–548:8.

⁷⁹ Deposition of Jinping McCormick, January 9, 2019, pp. 20:10–13, 112:20–114:24, 258:3–15.

⁸⁰ Deposition of Andrew Boyer, January 15, 2019 (“Boyer Deposition”), pp. 22:21–24, 125:9–129:21. (When asked about “print advertising, internet advertising, recruitment of key opinion leaders, . . . [and] joint marketing and

47. In line with academic findings, the Teva and Actavis Generic Defendants incurred minimal marketing spending for their generic medicines, despite the fact that there are the more than 1,000 generic products in their portfolio.⁸¹ In fact, according to Dr. Rosenthal's IQVIA data, the Teva and Actavis Generic Defendants did not incur any marketing spending for 8 of their 14 generic opioid medicines. Between January 1995 and May 2018, the proposed period of allegations, the marketing spending by the Teva and Actavis Generic Defendants on their generic opioid medicines accounted for 0.09 percent of the combined marketing spending by *all* of the Defendant and non-Defendant manufacturers on branded and generic opioids as identified by Dr. Rosenthal (See **Exhibit 7**).⁸² The marketing spending by the Teva and Actavis Generic Defendants on each generic opioid medicine, using Dr. Rosenthal's IQVIA data, is shown in **Exhibit 8**.

48. The highly limited marketing activities for generic medicines are also evident from deposition testimony of Christine Baeder, the Chief Operations Officer of Teva USA's generic segment. She testified that Teva USA does not promote generic medications to physicians because "[t]he decision-maker in generic procurement is not the physician. It's the officer at a corporate retail chain."⁸³ When asked about Teva USA's promotion of generic opioid medication to patients, Ms. Baeder again confirmed that Teva USA does not promote generic medication to patients because "[t]he economics of the generic products don't support the generally very expensive interfaces to reach patients."⁸⁴ According to Ms. Baeder, with regards to generic medication, Teva "provide[s] availability information, [Teva] provide[s] a price, and [Teva] tr[ies] to negotiate a construct of a framework with a customer

promotion efforts of generic products . . . with other manufacturers," Boyer said that this did "[n]ot [happen] on the generic side of the business" beyond mentioning product availability or the company's supply chain.)

⁸¹ Deposition of Christine Baeder, January 24, 2019 ("Baeder Deposition"), pp. 28:7–9, 40:9–13. ("Teva has around 1,200 [generic] products. I think we've had up to 1,500 generic products and right now we have somewhere between 1,100 and 1,200 [generic] products.").

⁸² The marketing spending for generic opioids in **Exhibit 7** and **Exhibit 8** includes promotional spending by manufacturers Dr. Rosenthal classifies as "Teva" and "Actavis" in her Defendant classification. This includes promotional spending by "Actavis," "Barr Labs," "Royce Labs," "Teva," and "Watson Labs" as recorded in Dr. Rosenthal's IQVIA data.

⁸³ Baeder Deposition, p. 416:5–15.

⁸⁴ Baeder Deposition, pp. 416:16–417:1.

that makes [Teva] relatively easy to do business with. But that's really all [Teva] ha[s] from a promotional perspective.”⁸⁵

49. Similarly, several former personnel from the Actavis Generic Defendants also testified that the Actavis Generic Defendants did not promote the safety, efficacy, or therapeutic value of their generic medicines (to physicians or otherwise).⁸⁶ According to Michael Perfetto, former Vice President of Actavis Sales and Marketing, “if you look at generics, we’re all the same product. So we use quality, product supply, and pricing primarily to sell our products.”⁸⁷ Andy Boyer, former Senior Vice President of Actavis Sales and Marketing, further added that “[i]t is physically impossible for a generics company to hire enough sales representatives to go in and speak to physicians about all of [their] generics products.”⁸⁸ Mr. Boyer also noted that, “We don’t detail products . . . These are not brands, these are generics. We offer up a price and we offer up a consistent supply in our supply chain and hopefully quality products . . . There’s no pushing, there’s no detailing, there’s nothing else there.”⁸⁹

50. Plaintiffs’ experts have ignored that the Teva and Actavis Generic Defendants have not promoted the safety and efficacy of their generic products and that, as a result, sales of the Teva and Actavis Generic Defendants’ generic opioids could not have been caused by the Teva and Actavis Generic Defendants’ own marketing efforts.⁹⁰ Dr. Rosenthal, however, conducts her analysis by combining the shipments and marketing activities of all branded and generic opioids.⁹¹ Thus, her analysis is unable to accurately evaluate the impact of the Teva and Actavis Generic Defendants’ marketing activities, if any, on the sales of the Teva and

⁸⁵ Baeder Deposition, p. 134:1–12; See also, Hassler Deposition (November 2018), p. 108:8–13 (“it just wasn’t a practice that they would talk about the therapeutic information in the [generic] product. They typically just ran with the brand name, the dosage strength, and the availability of the product.”).

⁸⁶ See, for example, Deposition of Douglas Boothe, January 17, 2019, pp. 146:21–147:10 (“Q. Are you aware of what marketing tools were used by Actavis to drive sales of its generic drugs, including opioids, while you were at the company? . . . A. . . . generic drugs generally don’t do a lot of marketing.”); Deposition of Michael Perfetto, December 18, 2018 (“Perfetto Deposition”), p. 315:11–21 (“Q. Okay. And what marketing tools did Actavis use to drive sales of these generic products while you were there? . . . A. We -- we don’t -- we don’t market products. We sell generics. We don’t use marketing. We actually don’t use promotion.”); Deposition of David Myers, December 13, 2018, p. 83:6–11 (“Watson [Actavis] did not believe in really advertising generic pharmaceuticals.”).

⁸⁷ Perfetto Deposition, pp. 315:22–316:2.

⁸⁸ Boyer Deposition, p. 317:3–7.

⁸⁹ Boyer Deposition, p. 346:9–17.

⁹⁰ Note that there is no generic version of Fentora on the market as of December 31, 2017.

⁹¹ Rosenthal Report, ¶¶ 11, 58–64.

Actavis Generic Defendants' at-issue opioid products, let alone the impact from the alleged false marketing activities by the Teva and Actavis Generic Defendants.

VI. Dr. Rosenthal Incorrectly Assumes that All Promotion by the Manufacturer Defendants Was Unlawful and that the Teva Defendants Would Not Promote Actiq or Fentora Absent the Alleged Unlawful Promotion

51. Dr. Rosenthal claims she “can reasonably identify approximately 45-67% of MMEs during the period of [her] analysis as caused by unlawful promotion.”⁹² However, the purported excess MMEs that Dr. Rosenthal attributes to the alleged unlawful promotion are based on assumptions that are incorrect and inconsistent with the evidence in this matter.

52. More specifically, Dr. Rosenthal's analyses are based on the assumption that “*all or virtually all* promotion by the manufacturer Defendants from 1995 to the present was unlawful (emphasis added).”⁹³ To quantify the MMEs but for the alleged unlawful promotion, Dr. Rosenthal modeled a world in which “promotion did not occur.”⁹⁴ In other words, Dr. Rosenthal assumes that the manufacturer Defendants would not conduct any marketing or promotional activities absent the alleged misconduct. This assumption is unfounded for two reasons. First, Dr. Rosenthal has not provided any evidence that the Teva Defendants would cease all of their promotional activities but for the alleged unlawful marketing. Second, she has not provided any evidence showing that all of the Teva Defendants' marketing messages are “unlawful.”

53. In fact, as I will discuss below, it is standard for pharmaceutical manufacturers to promote the branded products they sell. Pharmaceutical companies often engage in various promotional activities such as detailing by sales representatives, advertising in medical journals, and sponsoring educational and promotional meetings. Moreover, the Teva Defendants' marketing messages contain information that educates prescribers on the risks and indications of their prescription opioids. By not accounting for these two facts, Dr. Rosenthal has incorrectly inflated her estimates of excess MMEs but-for the alleged unlawful promotion.

⁹² Rosenthal Report, ¶ 11.

⁹³ Rosenthal Report, ¶ 75.

⁹⁴ Rosenthal Report, ¶ 75.